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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,899

03/24/2004

Sang-Eun Nam

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7413

35884

7590

04/03/2008

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EXAMINER

SAMS, MATTHEW C

ART UNIT

PAPER NUMBER

2617

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04/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,899	<b>Applicant(s)</b> NAM, SANG-EUN	
	<b>Examiner</b> MATTHEW C. SAMS	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-14, 16, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-14, 16, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/26/2008 has been entered.

### ***Response to Amendment***

2. Claims 1, 10, 11, 16 and 17 have been amended. Claims 7-9 and 15 have been canceled.

### ***Claim Objections***

3. Claim 11 is objected to because of the following informalities: "lin" should be "in". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. The term "substantially" in claims 1, 11 and 17 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the

specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable by Krautz et al. (US-4,334,341 hereinafter, Krautz).

Regarding claim 1, Krautz teaches a locking mechanism (Figs. 1-4) comprising:

a plurality of spring loaded locking members (Fig. 1 [9]), each having a bias spring (Fig. 1 [10]), wherein each locking member is biased in a closed position by its bias spring; (obvious because the release (Fig. 3 ["Press" & 24]) separates both spring loaded locking members (Fig. 1 [9]) from the indentations (Fig. 1 [11]) in order for the lock (Fig. 1 [1]) to separate from tongue (Fig. 1 [2]))

a lock release device (Fig. 3 [25]) operatively coupled to the plurality of locking members (Fig. 3 [9, 12 & 13]) to simultaneously move the plurality of locking members wherein each of the plurality of locking members moves laterally in a substantially different direction (Col. 2 lines 30-58 and Figs. 1-3 *i.e.* the locking members move towards the top and bottom of the page), and wherein the lock release device moves

orthogonally to each of the plurality of locking members; (Fig. 3 *i.e.* the lock release device moves perpendicularly to the locking members by moving towards the left and right edges of the page) and

a plurality of latching members (Fig. 1 [11]) being securely gripped by the plurality of locking members (Fig. 1 [9]), wherein the lock release device (Fig. 3 [24 & 25]) is in partial frictional contact with the plurality of locking members under the spring bias of each of the locking members, (Figs. 1-3 and Col. 2 lines 30-58) and

wherein each latching member being released from the grip of the corresponding locking member when the lock release device is forced in frictional sliding contact with the plurality of locking members against the spring bias of each of the locking members. (Col. 2 lines 54-58)

Krautz differs from the claimed invention by not explicitly reciting the spring loaded locking members each having a bias spring. However, it is obvious to one of ordinary skill in the art that the spring (Fig. 1 [10]) is securely attached to the lock (Fig. 1 [1]) and that both spring arms function independently from each other as two separate bias springs. Therefore, it is obvious to one of ordinary skill in the art that the spring (Fig. 1 [10]) within Krautz functions as two bias springs and could be replaced by two bias springs which function identically to Fig. 1 [10].

Regarding claim 4, Krautz teaches the lock release device (Fig. 3 [24 & 25]) includes a first surface adapted to match the curvature of a corresponding second surface on each locking member. (Fig. 3 [9 & 24])

Regarding claim 5, Krautz teaches each of the first and second surfaces has an included configuration. (Fig. 3 [9 & 24])

Regarding claim 6, Krautz teaches the lock release device is spring-loaded. (Fig. 1 [10])

Regarding claim 10, Krautz teaches the first and second inclined surfaces are in frictional sliding contact when the lock release device is forced to move orthogonally to each of the plurality of locking members. (Fig. 1-3 and Col. 1 line 62 through Col. 2 line 58)

8. Claims 2, 3, 11-14, 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krautz in view of Latella et al. (US-5,738,954 hereinafter, Latella).

Regarding claim 2, Krautz teaches the limitations of claim 1 above, but differs from the claimed invention by not explicitly reciting the latching members and the plurality of locking members are used to removably lock a battery cover to the main body of a mobile telephone set.

In an analogous art, Latella teaches battery cover for a mobile telephone set (Fig. 2 [100 & 102]) that is attached by sliding (Fig. 16 [1601]) the battery cover (Fig. 16 [102]) onto the mobile telephone set (Fig. 16 [100]) and includes latching members (Fig. 4 [404]) and a plurality of locking members. (Fig. 4 [406], Col. 4 line 54 through Col. 5 line 11, Fig. 8 and Fig. 9) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Krautz after modifying it to secure the battery cover of Latella. One of ordinary skill in the art would

have been motivated to do this since it provides a secure locking mechanism which is inexpensive and reliable. (Krautz Col. 1 lines 38-46)

Regarding claim 3, Krautz in view of Latella teaches each of the locking members include at least one locking leg (Krautz Fig. 3 [9]) adapted to grip the corresponding latching member (Krautz Fig. 1 [11]) to secure the battery cover to the main telephone body. (Latella Fig. 2 [100 & 102])

Regarding claim 11, Krautz teaches a locking mechanism (Figs. 1-4) comprising:  
a first and second locking member; (Fig. 1 [9] *i.e.* second locking member not labeled, but shown in Fig. 1)

a first and a second bias spring biasing the first and the second locking members, respectively, in a closed position; (Fig. 1 [10])

a lock release device (Fig. 3 [25]) operatively coupled to the first and second locking members (Fig. 3 [9, 12 & 13]) to simultaneously move the first locking member in a first direction (towards the top of the page) against the first bias spring and the second locking member in a second direction (towards the bottom of the page) against the second bias spring wherein the first and second direction are substantially different (Col. 2 lines 30-58), and wherein the lock release devices moves in a third direction that is orthogonal to each of the first and second locking members; (Col. 2 lines 30-58 and Figs. 1-3 *i.e.* the lock release device moves perpendicularly to the locking members by moving towards the left and right edges of the page while the locking members move towards the top and bottom of the page) and

a first and second latching member (Fig. 1 [11]) being securely gripped by the first and second locking members (Fig. 1 [9]), wherein the lock release device (Fig. 3 [24 & 25]) is in partial frictional contact with the first and second locking members under the spring bias of each of the locking members, (Figs. 1-3 and Col. 2 lines 30-58) and

wherein each latching member being released from the grip of the corresponding locking member when the lock release device is forced in frictional sliding contact with the first and second locking members against the spring bias of each of the locking members. (Col. 2 lines 54-58)

Krautz differs from the claimed invention by not explicitly reciting the spring loaded locking members each having a bias spring. However, it is obvious to one of ordinary skill in the art that the spring (Fig. 1 [10]) is securely attached to the lock (Fig. 1 [1]) and that both spring arms function independently from each other as two separate bias springs, moving in opposite directions against their spring bias (towards the top of the page and towards the bottom of the page). Therefore, it is obvious to one of ordinary skill in the art that the spring (Fig. 1 [10]) within Krautz functions as two bias springs and could be replaced by two bias springs which function identically to Fig. 1 [10].

Krautz differs from the claimed invention by not explicitly reciting the latching members and the plurality of locking members are used to removably lock a battery cover to the main body of a mobile telephone set.

In an analogous art, Latella teaches battery cover for a mobile telephone set (Fig. 2 [100 & 102]) that is attached by sliding (Fig. 16 [1601]) the battery cover (Fig. 16



[102]) onto the mobile telephone set (Fig. 16 [100]) and includes latching members (Fig. 4 [404]) and a plurality of locking members. (Fig. 4 [406], Col. 4 line 54 through Col. 5 line 11, Fig. 8 and Fig. 9) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Krautz after modifying it to secure the battery cover of Latella. One of ordinary skill in the art would have been motivated to do this since it provides a secure locking mechanism which is inexpensive and reliable. (Krautz Col. 1 lines 38-46)

Regarding claim 12, Krautz in view of Latella teaches the lock release device (Krautz Fig. 3 [24 & 25]) includes a first surface adapted to match the curvature of a corresponding second surface on each locking member. (Krautz Fig. 3 [9 & 24])

Regarding claim 13, Krautz in view of Latella teaches each of the first and second surfaces has an included configuration. (Krautz Fig. 3 [9 & 24])

Regarding claim 14, Krautz in view of Latella teaches the lock release device is spring-loaded. (Krautz Fig. 1 [10])

Regarding claim 16, Krautz in view of Latella teaches the lock release device (Krautz Fig. 3 [24 & 25]) is adapted to move in the third direction against its spring bias. (Krautz Fig. 3 [arrow])

Regarding claim 17, Krautz in view of Latella teaches the third direction is substantially perpendicular to a rear surface of the mobile terminal's body. (Krautz Fig. 1-3 *i.e.* Release moves in the direction of the arrow (Krautz Fig. 3) and the releases separate towards the top and bottom of the page and Latella Fig. 2 *i.e.* surface of the elevating portion created because part [202] is raised)

Regarding claim 19, Krautz in view of Latella teaches the first and second inclined surfaces are in frictional sliding contact when the lock release device is forced to move in the third direction. (Krautz Fig. 1-3 and Col. 2 lines 24-58)

Regarding claim 20, Krautz in view of Latella teaches each of the locking members include at least one locking leg (Krautz Fig. 3 [9]) adapted to grip the corresponding latching member (Krautz Fig. 1 [11]) to secure the battery cover to the main telephone body. (Latella Fig. 2 [100 & 102])

### ***Response to Arguments***

9. Applicant's arguments filed 2/25/2008 have been fully considered but they are not persuasive.

10. Orthogonal means perpendicular. Krautz teaches the lock release device moves perpendicularly to the locking members by moving towards the left and right edges of the page while the locking members move towards the top and bottom of the page. (Figs. 1-3 and Col. 2 lines 30-58)

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW C. SAMS whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571)272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/

Supervisory Patent Examiner, Art Unit 2617

MCS

3/29/2008